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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,144	02/14/2002	Doreen S. Rao	BSC-201 (1002/276)	6889

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EXAMINER

WEBB, SARAH K

ART UNIT PAPER NUMBER

3731

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/075,144	Applicant(s) RAO ET AL.	
	Examiner Sarah K. Webb	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14, 15, 17, 22-34, 36-42 and 45-59 is/are pending in the application.
 4a) Of the above claim(s) 4, 5, 7, 10-12, 15, 18-20 and 23-27 is/are withdrawn from consideration.
 5) ☒ Claim(s) 49-59 is/are allowed.
 6) ☒ Claim(s) 1-3, 6, 8, 9, 14, 17, 21, 28-34, 36-42, and 45-48 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 1-3,6,8,9,14,17,21,28-34,36-42, and 45-48 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a non-loop segment, does not reasonably provide enablement for a tubular non-loop segment. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. The definition of "tubular" requires the segment to be hollow, which a lumen through which fluid can flow. The non-loop segments (32) shown in Figures 2 and 3A are not hollow. If the segment were hollow, the loops would have no attachment point.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-3,6,8,9,14,17,21,28-34,36-42, and 45-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claims 1,22, and 36 include the limitation "*diameter of at least one of the end-pieces being larger than a diameter of a body canal within which a portion of the device is disposed.*" The structural requirements are based on an undefined anatomical structure, so this limitation renders the claims indefinite.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-3,6,8,9,14,22,28-30,32-34,36-42,44, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Des. 335,106 to Teeter.

Teeter clearly illustrates a device that has an elongate body formed of discrete circular interconnected loops and two end pieces. One of the end pieces is spherical and both end pieces have a diameter larger than the diameter of the loops. There is a non-loop segment connected to several of the loops. The device is capable of being inserted into a body canal. Depending on the body canal into which the device inserted, the diameter of the end pieces may be larger than that of the canal so that the device is retained in a certain location.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-3,6,8,9,14,16,17,22,30-34,36-42, and 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,458,119 to Berenstein et al.

Berenstein discloses a device for treating a blood vessel, which is a "body canal." The elongated body has alternating sections that have different configurations. As shown in Figures 3 and 4, the body has coiled sections (302 or 402) alternating with braided sections (304 or 404). The device includes both proximal and distal "end-pieces" (306) (see column 5, line 62- column 6, line 4). Figures 6A-C illustrate an alternate form of a flexible elongate body that is in the form of interconnected loops, or a chain. Berenstein teaches that the chain has a similar diameter to the coil and all of

the configurations are extremely soft and flexible (column 7, lines 23-25 and 37-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the coil sections of the embodiment in Figure 3 with chain segments, as Berenstein teaches that all of the segment configurations are highly flexible and perform similar functions. This modification would result in a device with at least one non-loop segment (braided segments) connected to interconnected loops.

The loops are considered to have a circular shape, are closed and discrete, and have a circular cross-section. The end pieces are considered to meet the limitation "substantially spherical", as they have a rounded shape. Berenstein also states that the end pieces can be joined to the body by fusing or epoxy (column 4, lines 29-35). The non-loops segments are "compressible", as they can be formed of polymeric materials (column 5, lines 10-17 and 45-55). Berenstein also teaches here that segments of the device can be formed of degradable materials, such as cotton and silk.

Allowable Subject Matter

5. Claims 49-59 are allowed. The following is a statement of reasons for the indication of allowable subject matter: Prior discloses many devices for insertion into a body canal that includes an elongate with end pieces having diameters larger than the diameter of the elongate body. Prior art also teaches that elongate bodies can be formed of interconnected loops. Prior art fails to disclose a device that includes a non-loop segment connected to and separating at least two loops.

Response to Arguments

6. Applicant's arguments filed 10/7/06 have been fully considered but they are not persuasive. Applicant's arguments are based on the new limitations that raised 112 2nd paragraph issues, as discussed above. The new limitations have only

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rendered the claims indefinite, and have not further limited the claims in such a way as to overcome the prior art rejections. Therefore, the rejections in the prior office action have not been withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah K. Webb whose telephone number is (571) 272-4706. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SKW
3/3/06

SKW
Julian W. Woo

JULIAN W. WOO
PRIMARY EXAMINER